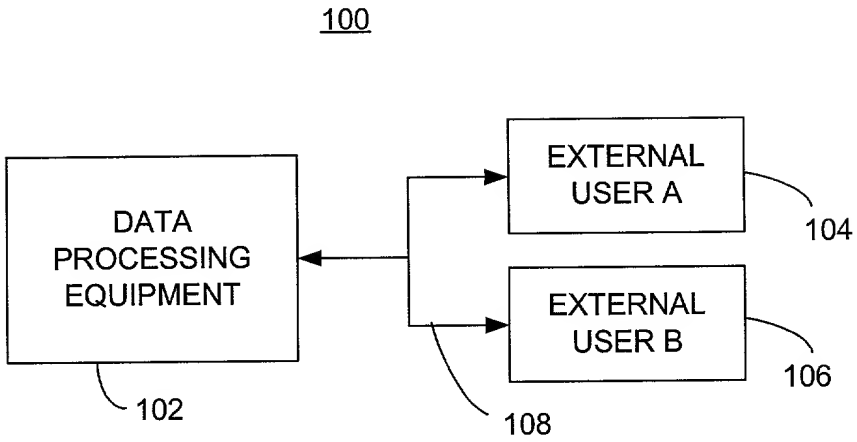
100
DATA PROCESSING EQUIPMENT
102
EXTERNAL USER A
104
EXTERNAL USER B
106
108

FIG. 1

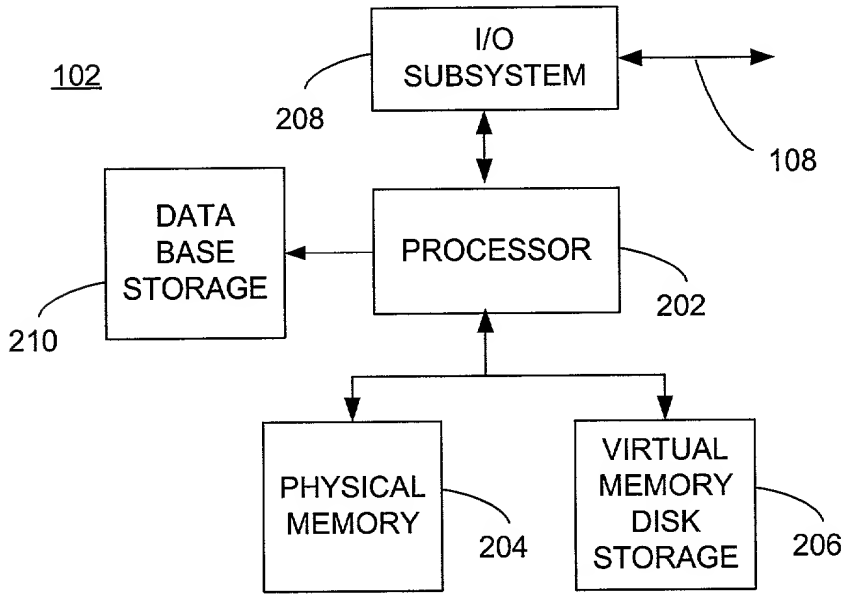
102
I/O SUBSYSTEM
208
108
DATA BASE STORAGE
210
PROCESSOR
202
PHYSICAL MEMORY
204
VIRTUAL MEMORY DISK STORAGE
206

FIG. 2

300

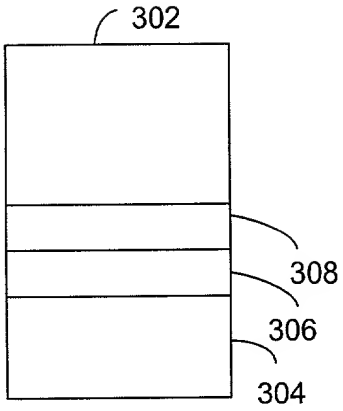

FIG. 3

400

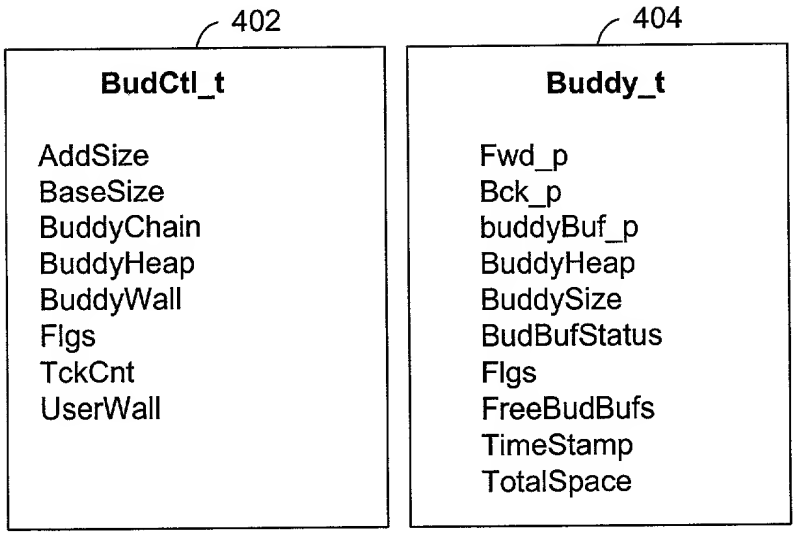

FIG. 4

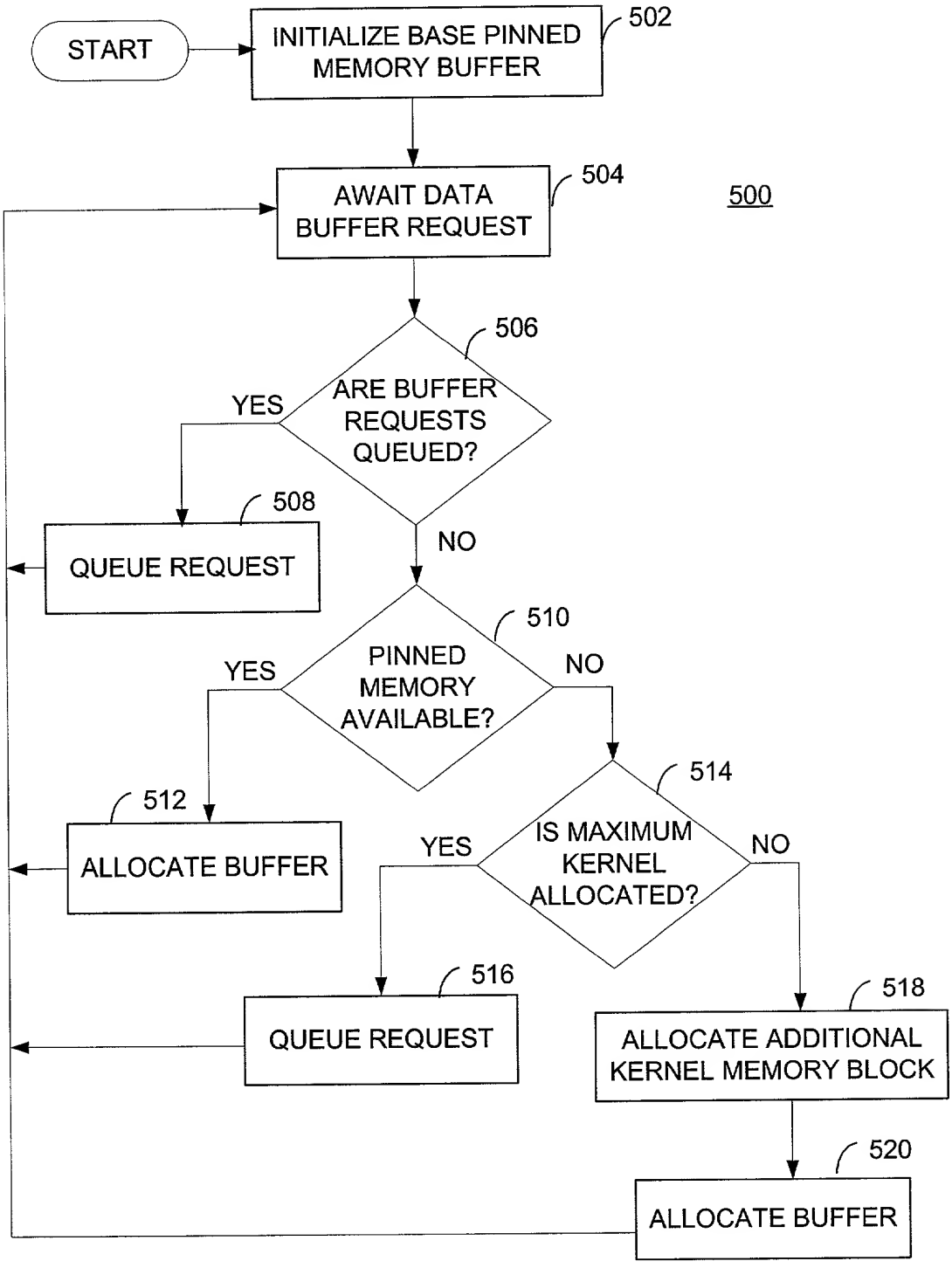
START
INITIALIZE BASE PINNED MEMORY BUFFER
502
AWAIT DATA BUFFER REQUEST
504
500
ARE BUFFER REQUESTS QUEUED?
506
YES
NO
QUEUE REQUEST
508
PINNED MEMORY AVAILABLE?
510
YES
NO
ALLOCATE BUFFER
512
IS MAXIMUM KERNEL ALLOCATED?
514
YES
NO
QUEUE REQUEST
516
ALLOCATE ADDITIONAL KERNEL MEMORY BLOCK
518
ALLOCATE BUFFER
520

FIG. 5

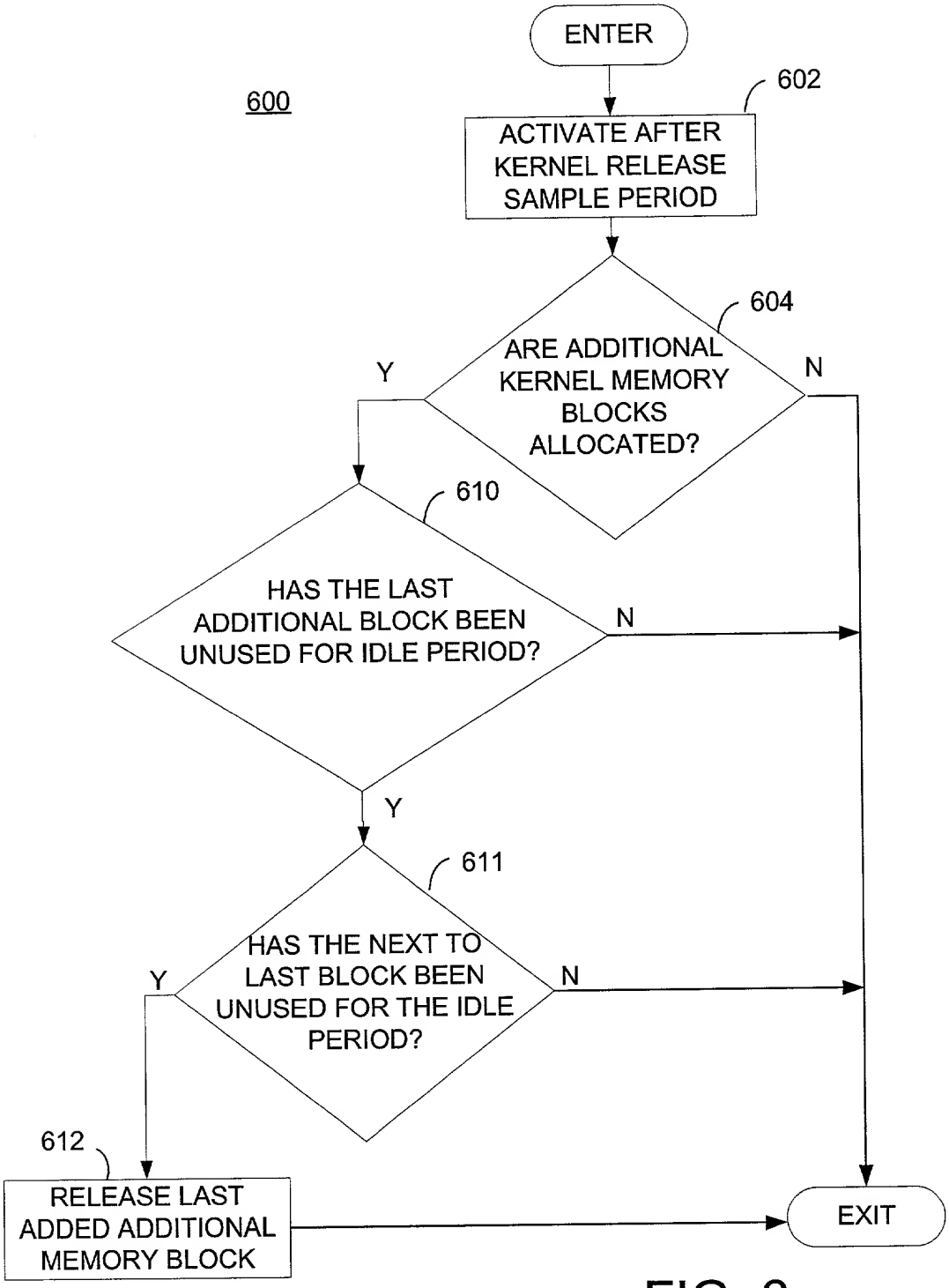
ENTER
600
602
ACTIVATE AFTER KERNEL RELEASE SAMPLE PERIOD
604
ARE ADDITIONAL KERNEL MEMORY BLOCKS ALLOCATED?
Y
N
610
HAS THE LAST ADDITIONAL BLOCK BEEN UNUSED FOR IDLE PERIOD?
N
Y
611
HAS THE NEXT TO LAST BLOCK BEEN UNUSED FOR THE IDLE PERIOD?
Y
N
612
RELEASE LAST ADDED ADDITIONAL MEMORY BLOCK
EXIT

FIG. 6